

AMENDED CLAIMS

1/ Process for merging batches of objects (L1,L2), each previously ordered according to a certain classification of the objects (A), so as to constitute a single batch of objects ordered according to said classification, in which process said batches are loaded in destacking units (D1,D2) which deliver said objects in series and in which each object destacked from a destacking unit travels past a device (DL1,DL2) for reading a classification cue of said object to be transferred to a conveyor (CS) linked to said destacking units in a such a way that the objects exit the conveyor in series according to the order corresponding to said classification, characterized in that said objects destacked from a destacking unit (D1,D2) are transferred to said conveyor (CS) through at least a first (M11,M21) and a second (M12,M22) dynamic-storage magazine linked and associated to said destacking unit, said destacked objects moving in series into each dynamic-storage magazine around a storage loop, in that a control/command unit (U) controls each destacking unit (D1,D2) and the first and second dynamic-storage magazine (M11,M12 ;M21,M22) associated to said destacking unit for loading said first dynamic-storage magazine (M11,M21) with a certain number of first ordered objects destacked from said destacking unit and for loading said second dynamic-storage magazine (M12,M22) with a certain amount of following ordered objects destacked from said destacking unit, and in that said control/command unit (U) analyses the classifying cues for the objects pending in the dynamic-storage magazines to cause said first dynamic-storage magazine (M11,M21) associated to a destacking unit to be emptied to said conveyor before said second dynamic-storage magazine (M12,M22) associated to said destacking unit to be emptied to said conveyor, the loading and the emptying of said dynamic-storage magazines being repeated until said destacking units are completely emptied.

2/ Process according to claim 1, in which said first (M11,M21) and second (M12 ,M22) dynamic-storage magazine linked and associated to a destacking unit (D1,D2) operate alternatively to be loaded with destacked objects and emptied to said conveyor.

3/ Process according to any one of claims 1 to 2, in which said objects are mail items and in that said classification is an order of distribution of mail items in the mailman's round.

4/ Machine for carrying out the process according to any one of claims 1 to 3, in which said first (M11,M21) and second (M12,M22) dynamic-storage magazine linked and associated to a destacking unit (D1,D2) have corresponding entrances (E) linked in parallel to said destacking unit and corresponding exits (S) linked in parallel to said conveyor (CS), and in which a device (DL1,DL2) for reading a classification cue is disposed between each destacking unit (D1,D2) and its first and second associated dynamic-storage magazine (M11,M12 ;M21,M22).

5/ Machine according to claim 4, in which a delay line (R) is mounted between the exit (S) of each dynamic-storage magazine (M11,M12,M21,M22) and said conveyor (CS).

6/ Machine according to any one of claims 4 to 5, in which a further dynamic-storage magazine (M3) is mounted in parallel with said conveyor (CS) downstream said dynamic-storage magazines (M11,M12,M21,M22).

7/ Machine according to claim 6, in which said further dynamic-storage magazine (M3) comprises a storage loop.

8/ Machine according to any one of claims 4 to 7, in which said first and second dynamic-storage magazine (M11,M12 ;M21,M22) linked and associated to a destacking unit (D1,D2) have the same storage capacity.